

CLAIMS

1. Method for the management of roaming of mobile subscribers between a home network and foreign networks, in which method the roaming behavior of a mobile terminal is based on roaming settings in the form of contents of different control files saved in the mobile terminal of the subscribers, one file containing a list of networks to be used in a priority order in a roaming situation and a second file containing information about the last network the subscriber was registered in, the second file being the primarily used information in the roaming situation, the method comprising the following steps
- a) the subscriber roaming from one network to another network,
- b) checking the current roaming setting for the subscriber and,
- c) if the network that the subscriber roamed into does not correspond to the highest priority network, moving the subscriber to a preferred network.
- corresponding to said priority order,
- characterized in that, the subscriber is moved to the preferred network by
- d) saving changed second file information to be used in the moving,
- e) sending information about said change to the mobile terminal, as a consequence of which,
- f) the network connection is re-established by the mobile terminal by selecting the preferred network from said changed information.
2. Method of claim 1, characterized in that the changed second file information saved in step d) is performed by updating said second file to be in accordance with said list.
3. Method of claim 2, characterized in that in step e) information about said updating is sent to the mobile terminal as a consequence of which the network connection is re-established by the mobile terminal by reading and selecting from said second file the preferred network.
4. Method of any of claims 1 - 3, characterized in that any attempt from the mobile terminal to write a new value to the second file until the preferred network is roamed into is intercepted.

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5. Method of claim 1, characterized in that the changed second file information saved in step d) is performed by saving the desired value of the second file in some other place than the second file and by setting set an indication that dynamic roaming is ongoing.
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6. Method of claim 5, characterized in that the second file is updated after step e) after which the network connection is re-established by the mobile terminal by reading and selecting from said second file the preferred network.
- 10 7. Method of claim 5, characterized in that the mobile terminal attempt to read the second file is intercepted by answering with the value saved in said other place than the second file, after which the network connection is re-established by the mobile terminal by using said saved value.
- 15 8. Method of any of claims 1 -7, characterized in that step b) is performed by a roaming management application, which detects if the subscriber is not on the preferred network and decides to use dynamic roaming to actively move the subscriber to a preferred network.
- 20 9. Method of claim 8, characterized in that in order to actively move the subscriber to a preferred network, the roaming management application sends a command to a dynamic roaming client for performing step d).
- 25 10. Method of any of claims 1 - 7, characterized in that step b) is performed by a dynamic roaming client, which detects if the subscriber is not on the preferred network and decides to use dynamic roaming to actively move the subscriber to a preferred network.
- 30 11. Method of any of claims 1 - 10, characterized in that step d) is performed by a dynamic roaming server.
12. Method of any of claims 1 - 11, characterized in that said files are elementary files (EF) in the SIM card of the mobile terminal, which are specified in GSM 11.11, whereby said first file is EF_{PLMN} and said second file is EF_{LOC1}.

13. Method of any of claims 1 - 12, characterized in that step e) is performed by sending a proactive refresh command to the mobile terminal according to GSM 11.14 or TS 31.111.

- 5 14. Method of claim 13, characterized in that the refresh command to the mobile terminal according to GSM 11.14 or TS 31.111 is some of the level commands USIM Initialization, USIM Initialization and File Change Notification, SIM Initialization and Full File Change Notification, UICC Reset, USIM Application Reset and 3G Session Reset.